AMENDMENTS TO THE CLAIMS

please enter 2/11/04 JZ

1. (currently amended) A recombinant vector, pDATH-X (Dominant negative, Antisense, TET-ON controllable Heat shock promoter plasmid), said vector comprises ~~comprising the cassettes~~:

(a) cassette 1 comprising TET-ON expressed under the control of a heat shock promoter and a tet operator, wherein said TET-ON consists of a fusion of the coding sequences for amino acids 1-207 (SEQ ID NO:1) of tetracycline repressor and the C-terminus ~~last 130 amino acid~~ transcription activation domain (SEQ ID NO:2) of VP16 protein of the herpes simplex virus, wherein said heat shock promoter consists of heat shock response elements ~~consisting of nucleotide sequence -260 to 30~~ of the human heat shock 70 gene promoter (SEQ ID NO:3) linked to a minimal cytomegalovirus promoter (pCMV) and wherein said tet operator consists of 19 bp inverted repeats (SEQ ID NO:4) of operator O2 of TN10 to which tet repressor and TET-ON bind;

(b) cassette 2 comprising a cloning site for a therapeutic gene, X, downstream of a tetp-CMV promoter consisting of a tet operator linked to a minimal cytomegalovirus promoter (pCMV), wherein said tet operator consists of 19 bp inverted

repeats (SEQ ID NO:4) of operator O2 of TN10 to which tet repressor and TET-ON bind;

(c) cassette 3 comprising antisense TET-ON under the control of pCMV promoter, wherein said antisense TET-ON consists of an antisense sequence complementary to the first 80 nucleotides ~~of~~ encoding of the TET-ON sequence ~~including~~ the ATG start codon; and,

(d) cassette 4 comprising a dominant negative TET-ON under the control of pCMV promoter, wherein said dominant negative TET-ON consists of tet repressor without a VP16 transactivation domain.

2-28. (canceled)

2 ~~29~~. (new) The recombinant vector of claim 1, wherein said therapeutic gene X is TNF-α, and said vector has the sequence of SEQ ID NO:5.